

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

19. (previously presented) Intraocular lens, said intraocular lens being comprised of a flexible material, said lens having at least one relatively rigid portion, said flexible material of said at least one relatively rigid portion having a structural chemical modification to impart relative rigidity.

20. (previously presented) Intraocular lens according to claim 19, wherein the flexible material has functional groups which are capable of reacting with antagonistic functions of at least one reactive compound, whereby said reaction imparts relative rigidity to said flexible material.

21. (previously presented) Intraocular lens according to claim 19, wherein the structurally modified flexible material is a polymerized material.

22. (previously presented) Intraocular lens according to claim 19, wherein the structurally modified flexible material is hydrophilic.

23. (previously presented) Intraocular lens according to claim 19, wherein the flexible material is selected from the group consisting of crosslinked polymer and copolymer materials.

24. (previously presented) Intraocular lens according to claim 23, wherein the copolymer materials are random methyl-methacrylate-hydroxymethyl-methacrylate (MMA-HMA) copolymers crosslinked by a functional agent.

25. (previously presented) Intraocular lens according to claim 23, wherein the polymer functional agent is diethylene glycol dimethacrylate.

26. (previously presented) Intraocular lens according to claim 23, wherein the polymer materials are polydimethylsiloxanes.

27. (previously presented) Intraocular lens according to claim 19, wherein said intraocular lens comprises an optic part and a haptic part, said optic part being comprised of said flexible material and said haptic part including said at least one relatively rigid portion.

28. (previously presented) Intraocular lens according to claim 19, wherein said intraocular lens comprises an optic part and a haptic part, said optic part comprising one or more portions of the flexible material and one or more portions of the structurally modified flexible material.

29. (previously presented) Intraocular lens according to claim 19, wherein said intraocular lens comprises an optic part and a haptic part, said optic part comprising one or more

strips of the flexible material alternating with one or more strips of the structurally modified flexible material.

30. (previously presented) Intraocular lens according to claim 19, wherein said intraocular lens comprises an optic part and a haptic part, said optic part including one or more zones adjoining the haptic part and in continuity with one or more zones of the structurally modified flexible material of the haptic part.

31. (previously presented) Intraocular lens according to claim 19, wherein said intraocular lens comprises an optic part and a haptic part, said optic part being primarily made of the flexible material and the haptic part being primarily made of the structurally modified flexible material.

32. (previously presented) Intraocular lens according to claim 30, wherein the haptic part comprises appendices.

33. (previously presented) Intraocular lens according to claim 19, wherein the structurally modified flexible material is a random methyl-methacrylate-hydroxymethyl-methacrylate (MMA-HMA) copolymer modified with at least one reactive compound.

34. (previously presented) Intraocular lens according to claim 33, wherein said reactive compound is a monofunctional agent.

35. (previously presented) Intraocular lens according to claim 33, wherein said reactive compound is a monofunctional

agent selected in the group consisting of functional styrene, acrylic and methacrylic acids and their derivatives, allyl halides, carboxylic compounds and their derivatives, isocyanates, alkyl halides, epoxides, functional styrene derivatives, acryloyl methacryloyl halides, and allyl halides.

36. (previously presented) Intraocular lens according to claim 33, wherein the reactive compound is a polyfunctional agent serving as a coupling agent between the polymer chains of the MMA-HMA.

37. (previously presented) Intraocular lens according to claim 36, wherein the polyfunctional agent is selected in the group consisting of divinyl sulfone and its derivatives, polyfunctional carboxylic compounds and their derivatives, polyfunctional alkyl halides, di- and tri- isocyanates, polyfunctional epoxides, methacrylic acid, acrylic acid and alkylacryloyl.

38. (previously presented) Intraocular lens according to claim 37, wherein the reactive compound is a polyfunctional agent, one or more functions of said polyfunctional agent being antagonistic to the functions of MMA-HMA and are capable of reacting with them, the other function or functions of said polyfunctional agent being polymerizable allowing postpolymerization so as to increase crosslinking density and enhance relative rigidity.

39. (previously presented) Intraocular lens according to claim 38, wherein said polyfunctional agent is selected in the group consisting of functional styrene monomer, acryloyl halides, methacryloyl halides, and allyl halides.

40. (cancelled)

41. (cancelled)

42. (previously presented) Intraocular lens according to claim 33, wherein the reactive compound is a polyfunctional agent, one or more functions of said polyfunctional agent being antagonistic to the functions of the HMA and capable of reacting with them, the other function or functions being copolymerizable with a mixture of monomers and/or a polymer blend.

43. (previously presented) Intraocular lens according to claim 42, wherein said polyfunctional agent is selected in the group consisting of methacrylic acid, acrylic acid, and an alkylacryloyl halide.

44. (currently amended) A process for making an intraocular lens comprising the steps of:

- preparing ~~a pre-form for~~ an intraocular lens from a piece of flexible material; and

- ~~shaping the pre-form into an intraocular lens, and~~ selectively structurally modifying the flexible material of the ~~pre-form~~ intraocular lens material to define at least one relatively rigid portion.

45. (currently amended) A process according to claim [[44]] 66, wherein the step of selectively structurally modifying the flexible material includes impregnating at least one portion of the pre-form to be rigidified with a reactive compound.

46. (previously presented) A process according to claim 45, wherein the pre-form is made of polymeric or copolymeric material, the step of selectively structurally modifying the flexible material comprising chemically reacting the polymeric or copolymeric material with an organic compound.

47. (previously presented) A process according to claim 45, wherein the pre-form is made of polymeric or copolymeric material, the step of selectively structurally modifying the flexible material comprising polymerization after the chemical reaction of polymeric or copolymeric material.

48. (previously presented) A process according to claim 44, wherein the step of shaping the pre-form into an intraocular lens precedes the step of selectively structurally modifying the flexible material.

49. (previously presented) A process according to claim 45, wherein prior to impregnating at least a portion of the pre-form, a portion or portions of the pre-form not to be impregnated are protected against impregnation.

50. (previously presented) A process according to claim 49, wherein the portion or portions of the pre-form not to be impregnated are protected by a coating or film.

51. (previously presented) A process according to claim 50, wherein the coating or film is removed following impregnation.

52. (previously presented) A process according to claim 44, wherein the step of shaping the pre-form into an intraocular lens follows the step of selectively structurally modifying the flexible material.

53. (previously presented) A process according to claim 44, wherein the structurally modified flexible material is a modified random methyl-methacrylate-hydroxymethyl-methacrylate (MMA-HMA) copolymer, said copolymer being modified with at least one reactive compound.

54. (previously presented) A process according to claim 44, wherein the flexible material is selected from the group consisting of crosslinked polymer and copolymer materials.

55. (previously presented) A process according to claim 44, wherein the copolymer material is random methyl-methacrylate-hydroxymethyl-methacrylate (MMA-HMA) copolymer crosslinked by a functional agent.

56. (previously presented) A process according to claim 44, wherein the step of selectively structurally modifying the

flexible material comprises chemically reacting a monofunctional or polyfunctional reactive compound with a reactive element of the flexible material.

57. (previously presented) A process according to claim 44, wherein the step of selectively structurally modifying the flexible material comprises polymerization of one or more monomers within said flexible material.

58. (previously presented) A process according to claim 44, wherein the step of selectively structurally modifying the flexible material comprises polymerization of one or more monomers outside the flexible material.

59. (previously presented) A process according to claim 56, wherein the flexible material is made of polymeric or copolymeric material and the polyfunctional reactive compound is a coupling agent between the polymer chains of said polymeric or copolymeric material.

60. (cancelled)

61. (previously presented) A process according to claim 44, wherein the pre-form is made of polymeric or copolymeric materials, the step of selectively structurally modifying the flexible material comprising:

- reacting one or more reactive functions of the polyfunctional reactive compound with the reactive functions of said polymeric or copolymeric material; and



- copolymerizing the other reactive functions of the polyfunctional reactive compound with a mixture of monomers and/or polymer blend.

62. (previously presented) A process according to claim 55, wherein said functional agent is a monofunctional agent selected from the group consisting of functional styrene derivatives, acrylic and methacrylic acids and their derivatives, allyl halides, carboxylic compounds and their derivatives, isocyanates, alkyl halides and epoxides.

63. (previously presented) A process according to claim 55, wherein the functional agent is a polyfunctional agent serving as a coupling agent between polymer chains of the MMA-HMA, the polyfunctional agent being selected from the group consisting of divinyl sulfone and its derivatives, polyfunctional carboxylic compounds and their derivatives, polyfunctional alkyl halides, di- and tri- isocyanates, and polyfunctional epoxides.

64. (previously presented) Intraocular lens according to claim 42, wherein the monomers are selected from the group consisting of styrene, acrylic derivatives and alkylacrylic derivatives, and the polymer is PMMA.

65. (previously presented) A process according to claim 61, wherein the monomers are selected from the group consisting of styrene, acrylic derivatives and alkylacrylic derivatives, and the polymer is PMMA.

66. (new) A process according to claim 44, wherein the intraocular lens is prepared from a pre-form of the flexible material, and the pre-form is shaped into the intraocular lens before selectively structurally modifying the flexible material.

67. (new) An intraocular lens produced by the process of claim 44.